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**From:** Daniel Krewski [dkrewski@uottawa.ca]  
**Sent:** 8/8/2016 3:44:59 AM  
**To:** Robert Baan [BaanR@visitors.iarc.fr]  
**CC:** Brittany Milton [bmilton@risksciences.com]; Michael Bird [Personal Matters / Ex. 6]; Nicholas Birkett [Nicholas.Birkett@uottawa.ca]; Kurt Straif [StraifK@iarc.fr]; Cogliano, Vincent [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=51f2736376ac4d32bad2fe7cfef2886b-Cogliano, Vincent]; Kathryn Guyton [GuytonK@iarc.fr]  
**Subject:** Additional Mechanistic Analysis and Possible Addition to Mechanistic Analysis  
**Attachments:** Figure 2X. Heat Map of Human and Animal Sources August 7, 2016.png; 2016 Krewski et al Key Characteristics July 14.pdf; 8 Draft Consensus Statement July 15 DK Addition.docx

Robert, I'm attaching an analysis (Figure 2X) provided by Brittany Milton showing that information on the 10 key characteristics of human carcinogens often comes from both animal and human sources, in the form of heat map indicating such agreement for each of the 86 agents included in the mechanisms database.

1. Would it be worth adding Figure 2X to the mechanisms chapter (attached), either in place of or in addition to, the current Figure 2? [This would involve the preparation of only a short amount of text, observing that information on the 10 KCs – particularly for genotoxicity, but also for a number of other KCs – often comes from both human and animal sources.]
2. If we include Figure 2X to demonstrate 'concordance' between human and animal sources of information on the 10 KCs, would this support the addition to item 9 in the consensus statement (attached, and noted below) that I had suggested earlier?

*Consensus Statement #9. It is notable that in-vivo or in-vitro mechanistic data are often available in humans. For most key characteristics, when animal data are available for a key characteristic, human data are generally available, too. The observation that similar Key Characteristics are seen in humans and animals further supports the use of animal data in human cancer risk assessment.*

3. We still need a decision on whether or not to include the analysis of established/likely mechanisms in Nick Birkett's chapter. In the absence of further comments beyond those provided by Kurt Straif, I wonder if the most expedient approach would be to simply omit the analysis of established/likely mechanisms in Birkett et al, along with the short cross-reference to this analysis in Krewski et al. [As the WPs have not seen this analysis, it could also lead to a further round of discussion among the Workshop Participants about the relevance and/or interpretation of our analysis of established/likely mechanisms.]

I like the inclusion of both Figure 2X and the addition to item 9 in the consensus statement, but would prefer not to make this decision without input from others.

As soon as we have your response to questions 1 – 3 above, we can wrap up both Birkett et al and Krewski et al within a day or two.

Dan K.